UNITED STATES OF AMERICA

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DEPARTMENT OF THE INTERIOR

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MINERALS MANAGEMENT SERVICE

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OCS RENEWABLE ENERGY AND ALTERNATIVE USE PROGRAMMATIC EIS

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PUBLIC SCOPING MEETING

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WEDNESDAY, MAY 24, 2006

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The above entitled matter came on for Public Meeting pursuant to notice, at Melville Marriott, 1350 Old Walt Whitman Road, Melville, New York, on May 24, 2006, at 6:00 p.m.

P-R-O-C-E-E-D-I-N-G-S

2 (6:00 p.m.)agency that's 3 MS. ORR: We're the 4 responsible for managing the outer continental shelf of the United States, which is basically the area 5 beyond three miles off of the coast of the country, if 6 7 you look at this map. The mineral resources located -- mineral and energy resources located on the outer 8 continental shelf. 9 10 On a day-to-day-basis, we currently manage

On a day-to-day-basis, we currently manage over 8,500 leases. We have over 47 million acres currently under lease. Thirty percent of the oil and 21 percent of the natural gases produced in the United States come from lands that are managed by the Minerals Management Service. We have over 4,000 production platforms currently in operation. We oversee 33,000 miles of pipeline. There are over 42,000 people currently employed in activities associated with OCS. And a hundred and 25 operating companies that we work with.

And a lot of people don't know this, but over eight billion dollars from activities, mineral activities on the OCS go into the treasury every year.

This map is also, up here on the wall, this is just to give you an idea when I'm talking

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about the outer continental shelf and the area that we're going to be covering in this programmatic EIS, this is what we're talking about.

The Energy Policy Act of 2005, which was August, signed last gave MMS significant new responsibilities to oversee permitting of alternative energy, renewable energy projects on the continental shelf. It was signed in August. are 23 different provisions that related to different parts of the OCS and management of those resources, including renewable energy and alternative use of existing facilities. And I'll talk about that in a minute.

This is what it did. It amended the outer continental shelf lands act, which is our guiding legislation under which we operate to authorize Department of Interior, subsequently the Minerals Service, Management to permit alternative and renewable energy projects on the outer continental shelf. legislation told us that we needed to develop a regulatory regime that ensured consultations with states and other stakeholders. We need to grant leases, even to rights-of-way for the use of those We need to come up with a regulatory resources.

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compliance system and the way to enforce it; require financial security for those operators out there, and provide a fair return to the nation for the nation's resources, as resources beyond three miles belong to the nation as a whole.

What does it not do? It doesn't supercede or modify any existing federal authority. Any other legislation that's in place is still in place. It doesn't supercede any of those. It does not apply to areas designated as national sanctuaries, national parks, national wildlife refuge, or any national monument. We will not be permitting activities in those areas. And it does not include ocean thermal energy.

Some examples of OCS renewable energy, wind, wave, ocean current energy, technologies that are currently being developed, solar energy, hydrogen, any number of technologies that are on the drawing board now or that are being permitted as we speak. And Walt is going to make a presentation a little bit later, that will go into a little bit more detail about these technologies and give you a little bit more background on these.

Some examples of alternative use, in addition to renewable energy provisions that the

legislation had, it also gave us the authority to permit alternative use of existing OCS facilities. So, for example, the platforms that we have in the Gulf of Mexico, we now have authority to permit other uses beyond just production of oil and gas for those. We need to create a regulatory regime for that, as well. To allow us to permit activities such as aquaculture, or a facility to be used for research or education, or off-shore operation support.

So, what are we doing? What do we need to do? We need to enter into a meaningful dialogue with our stakeholders to help us create this new regulatory And we need to, as MMS, focus on our regulator role. We are the regulator for these We need to develop a regulatory compliance projects. system, ensure fair market value and environmental compliance. Using sound science engineering and environmental protection principles as we do this.

What are our main goals? We need to provide for multiple use management of these off-shore lands. To make sure that we can en -- that we identify and can manage all of the different uses. Protect the nation's economic and land use interests. Establish a predictable process, to facilitate private

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sector permitting and encourages public sector input. Provide the public and private sector with certainty and stability. We need to increase the balance of the nation's sources and supplies of energy; encourage new and innovative technologies to help meet our energy needs, and support the Energy Policy Act's initiative to simplify permitting for energy production in an environmentally safe manner.

These are foundations, foundation principles that we're following as we go through the development of this regulatory regime, and as we work through development of the programmatic EIS.

To date, we have published an advance notice of proposed rule-making that came out December of last year. And in that, we requested comments on issues that included, how should be these OCS lands? provide access to How do coordinate and consult with all of the interested parties? What environmental information compliance information do we need to include in a regulatory system? Help us identify what operational activities are that we need to make sure that we include -- encompass within that regulatory And how are we going to -- How should we determine payments and revenue? Help us design this

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regulatory system.

The public comment period closed on February 28th, 2006. We received a number of comments, very substantive comments, good comments that we're working through now.

The development of the rule-making also is paralleled by the development of the programmatic EIS, which is what we're here to talk about tonight. We'll talk about more of the specific environmental and socioeconomic impacts that we need to make sure that we consider as we design the regulatory system and also, look at the environmental impacts associated with the national program. That's why an EIS is needed.

The National Environmental Policy Act says that we need to analyze how a proposed action, this is a national program, how this national program could impact the natural and human environment. The analysis NEIS has used to help the decision makers understand not only the decision makers, but also, the public, understand the issues and help us as we need to make the decisions about whether and where and when to allow access to these resources, and what are the advantages and disadvantages of those decisions. And the analysis is made available for citizens to review.

What's in an EIS? It's the reason we're here tonight. For you to help us identify these issues.

The comprehensive analysis of the environmental and socioeconomic impact describes the purpose and need for the proposed program and in this instance, we're talking about this national program to develop the national regulatory system for permitting of these alternative energy projects. It identifies environmental impacts and mitigation. Analyzes the alternatives to a proposed action. And looks at the long and short-term impacts and the commitment of resources. What's it going to take for us to be able to do this? It describes how public concerns were treated in the analysis.

What is scoping? Scoping is what we're doing here tonight. It's not only the meetings that we're going to have, it's the comments that will be submitted via our website, as what we would receive in the mail. It's to help us determine what needs to go into this EIS. What's the scope of the EIS?

The types of comments that we're looking for? Tonight, we're looking for the comments on the program, the overall program, and the site-specific comments, and the scoping for the site-specific

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projects will come later. Issues of concern related to renewable energy development and alternative use of existing facilities. Input from industry regarding the potential areas of interest. Where are they interested? Where is the resource? Where do they see that it's economically viable? The types of technologies, the timing, when do they see these technologies coming on line and where?

Help us to identify mitigation measures and alternatives. Are there different ways of doing this that we should be considering, to make sure that we include it in our analysis. The environmental and predictive information that pertains to off-shore and coastal areas potentially affected by OSC development.

We need to know what environmental issues are out there, what are the species of concern, what are the activities of concern. Socioeconomic issues. We need to be aware of them and this is the opportunity for you to let us know what those concerns are, what those issues are, and what data is out there. This is our schedule. Currently, we're undertaking the scoping effort, in the first bullet up there. We'll run through July 5th. We will publish the draft environmental impact statement in February of 2007. And at the same time, we will publish the

proposed rule, which is parallel -- they need to run together. The public hearings which we will hold will be in March and April of 2007, to talk about what was in the draft EIS. The comment period on the draft EIS will close in April 2007. A final EIS in August. Executive decision in September and a final rule will be in September 2007.

And as I said, we are taking comments at our website. We've got comment cards out at the tables, or the address is there and I think it was in the material that you were given when you came in.

Walt's going to -- to give you an overview of the technology that's out there. But before he gets started, I wanted to acknowledge that we have a representative from Senator Schumer's, who's not going to speak, but she's here representing him and we're very glad to have her here.

(Pause.)

MR. MUSIAL: I think we've got it now. Good evening. My name is Walt Musial. I'm from the National Renewable Energy Laboratory. And I'm with the National Wind Technology Center, which is the national program that's been researching wind energy for almost 30 years now. I've been with the program

about 18 years. And recently, probably, the last three years, spent most of my time developing and working on this new thing called off-shore wind. So, what I'm here to tell you tonight and talk to you about is the technical perspective on the subject of off-shore wind and other uses of the -- of the ocean. I'll apologize in advance for my only cursory knowledge of some of the other ocean systems. But we're going to go through all of them, because they're all important and they all could come up some time.

I'm going to focus, probably, threequarters of my talk on off-shore wind energy. I'm going to talk a little bit about wave current, wave and current energy and then, hybrids, meaning a combination of the two and some advanced applications.

Starting with the resource, this is what we look at, this is what we think of as being the available energy that we can extract from a particular source of energy, much like a reserve oil well, if you will, except, this doesn't run out. These are —

These are different types of sources that we are looking at for the ocean. First and foremost here is the off-shore wind, that's why a lot of you are here today. I know a lot of faces as a result of the activity that's been going on in this area. But

there's wave energy, tidal energy and ocean current energy. And I compare all of those to the total generation capacity of the national grid. And you can see there's a lot of energy there to be made. And if I look at this in terms of the, you know, state by state, I think this looks even more impressive. So, when we start in and we have to make choices about energy, most people know we're at that point right now, where you have to start making diversification and choices, these are things we need to look at.

I put this slide up here, really, for background. This is really the penetration of wind on the -- worldwide, an accumulative growth curve showing that we have about 60,000 megawatts of wind worldwide right now. This is on shore, mostly. And I put this up here mainly for perspective. Eight hundred and four megawatts of off shore, less than two percent. So, off shore is a nascent industry, it's just starting right now, and there are some bumps in the road that we have to get through.

Europe is where all this energy is right now, all the off shore. This is a map of, you'll recognize, northern Europe, Denmark, Germany, UK. The projects that have gone in, there's 18 or 19 right now, 804 megawatts installed. Percentage-wise,

Denmark dominates, followed by the United Kingdom. A very small slice to Germany. But if we look at what's going to happen in the next five to ten years, we're going to see a big growth there, because, primarily, Europe is running out of good land sites and they value what wind can do to contribute to their national electric grid.

Here in the United States we have a kind of a mixed situation, a situation that similar to Europe in some ways, but different, because we've got this vast on-shore resource. This map represents the wind resource on this side. This map represents the population of the country. And everybody could agree that most of the population is clustered along the Not to say that there isn't land-based coastlines. sites outside of these red areas. This represents 80 percent of the wind class three or greater. There are sites all through here, but in terms of significance, most of the good wind sites are off shore when you come to these coastal states. And the matching for that load is significant.

This is a map that we made of projects that we know of, if your project's not on here, I apologize. There are some projects that are much further along than others. These are -- Some of these

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are in state waters and are not in the jurisdiction of Minerals Management. Some are further along than others. The ones in yellow, I've highlighted, because those permitting processes began before the Energy Policy Act, and they're in a different -- different phase of development. Some of these projects are in state waters and in particular, these big projects down in Texas. Texas state boundaries extend out 10.3 miles from the coast and so, they're kind of doing their own thing.

I want to talk to you about wind -- wind technology, because I assumed when I came here that, there would be some people that really didn't know that much about wind technology. But I apologize to the people who I know, know as much as I do, sitting in this audience. But generally, I want to make sure everybody comes away with an understanding of what a wind turbine is and what -- why it looks like it does. And this is kind of a schematic of -- of a wind The wind comes in this way, so this is an turbine. up-wind machine, and it encounters the rotor, which converts the wind into a torque which goes through a gear box which speeds it up, brings the power, the torque, into a higher speed generator and electricity down the tower. Kind of simple.

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There's a yaw system that makes sure that the wind turbine is oriented toward the wind at all times. And when we cluster these together, we call them a wind farm or a wind power plant. The clustered aggregate of all these systems equals in many cases, the capacity of a conventional fossil-fuel type power plant. And that's what we want to get across here.

I debated whether I should show equations this late at night, and I -- the foolish side of me won here. But I think this is an important thing to get across here, and that's why I put it up here, because I want people to understand that the power in the wind is going to have a relationship with the wind speed, this VE term, that's cubic, which means a small change in wind speed is going to have a large change in power. So, the power in the wind equals one-half times the air density, times the rotor area, which is the swept area that the blades make, the diameter -- it's the area of this circle that the rotor makes, times the velocity cubed. Okay?

And the first thing everybody wants to know when we design or build a wind turbine is, what's the power curve. The power curve is this, you measure power versus wind speed. And power advances with the cube of the wind speed to a point, and that point is

called rated power. So, if you have like a 3.6 megawatt wind turbine, 3.6 is what the level of that flat top there. And the reason that's flat is because the turbine starts to regulate its power, it feathers the blades and maintains that power, because the generator can't handle it. And at some point, it cuts out and that's called cut-out wind speed. So, this is advancing wind speed along here, and this is the power curve.

Now, just to illustrate this point one further. I went out and I looked for a wind site that was on land and I did this in Massachusetts. found an airport called Hanscom Field Massachusetts, about 30 miles inland. And they have an average wind speed of ten miles per hour. plugged that into this equation. Then, I went out and found a site off shore, I won't say which one. their average wind speed at the same elevation was 18 and a half miles per hour. And if I compare those two, the off-shore site has six and a half times more power at the same average wind speed as the on-shore And as far as energy production is concerned, if I -- they both have the same power curve, but I put one turbine, same machine on the off-shore site, an identical machine on the on-shore site, the off-shore

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machine makes five times more energy. And these are real sites that I was looking at. And so, it would take five wind turbines on shore to do the same thing as an off-shore turbine, and that's an important point to this energy relationship there.

So, now, we have some examples of swept area, that's the area part of our equation. see that swept area is getting bigger on some of This is a wind farm called Horns Rev. some wind turbines that were put Massachusetts. This is an old turbine that I used to work on out at Mt. Tom, Massachusetts. Machines now are actually getting designed at five megawatts, so they're getting bigger. The reason they're getting bigger is because maintenance costs go down with turbine size. Installation costs go down with turbine size. The grid infrastructure goes down with turbine Foundation costs go down with turbine size. size. the amount of energy you can generate submerged land area goes up with turbine size. So, there's a lot of reasons to go to bigger turbines, and we're doing that.

This is -- Now, I just have some pictures.

This is a 3.6 megawatt G.E. turbine operating in Arclo

Banks. There's the rotor, a hundred and four meters

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across. Hit the button, you can see my jumbo jet. That gives you an idea of the scale. That's a Boeing 747 super imposed on the rotor, so you can see how big that is.

One of the first things that has to happen during the development phase of any off-shore wind farm, or any on-shore wind farm for that matter is, monitoring the site, to make sure you have good wind. I've already just explained why wind is important. A small difference in the wind speed makes a huge difference in how much power or energy you can get. So, you have to know what that is pretty accurately.

So, the first thing a developer's going to do is, go out and put an anemometer tower up. This is an example of a Cape Wind -- of Cape Wind's anemometer tower. This is one in Europe that was put up for Horns Rev. And in addition to measuring wind speeds, which you see anemometers at different levels along the tops of these towers, we're going to be looking at waves off shore, and waves are important, because the wind/wave combination is important to the design conditions that the engineers have to use to design the machines. So, you can see, it's not -- it's not hard to imagine why a sheltered site might be a desirable thing, when it comes to waves, because waves

are -- waves would increase at a slower speed in a shelter site -- sheltered site with respect to wind speed. And it's also important to understand what the extremes are. And I know Minerals Management is going to be very involved in understanding and helping to decide that.

As an example, here's a typical wind farm This is a hundred and 60 megawatt Horns in Europe. Rev. It's on the west coast of Denmark. There are 80 turbines, each of them two megawatts -- two megawatt capacity, 80 meters in diameter. The total output of this wind farm is 600 gigawatt hours. No one probably understands that number. I'll put it into -- My conversion is 60,000 U.S. households that that can and probably, a hundred thousand Danish They use less energy than we do. other statistics. Fourteen kilometers from shore. don't know where this picture was taken from, so I can't answer the visual question. But generally, it's -- the turbines are put into an array. The spacing's probably about a quarter to a half mile between the turbines. So, they're not real close together. can't be, because they'll steal each others wind and they won't work.

Whenever you put a turbine in, and this is

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one of the complications of off-shore versus on-shore. We have to put in a foundation and the foundations become more sophisticated, more difficult off shore, because we can't just dig a hole and pour concrete in it. We have -- A monopile is a 20 foot diameter pipe that's pounded about 80 feet into the -- into the seabed and that's the type of foundation that was in the Horns Rev project that I just showed in the previous slide.

A couple other wind farms that exist in Europe use gravity-based foundations, which is exactly what it sounds like. It's just a big heavy piece of concrete that is placed on a level seabed and it's heavy enough to keep the turbine from tipping over. It's another option. It works. They both work. new type of foundation which may be employed in the future, designed especially, maybe, in the Gulf of Mexico, or if we get into deeper waters is the tripod or truss-type foundations. And this has a wider wheel base on the -- on the bottom which allows -- makes it stiffer, makes it work better in soft soils. are some examples.

This is the monopile. Here you see, a monopile that's been pounded in before the turbine was placed on top of it, out at Arclo Banks, and there's

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the final machine. There's another one getting installed out there. Gravity-based foundations, these are barged in from Poland in this case. This is the Samso Wind Farm in -- also in Denmark. You see this -- this cone here is, it's there for icing. The Baltic has about one-third of the salinity as the Atlantic and it ices over. So that when the ice flow hits that, it kinds of curls the ice underneath and prevents the machine from suffering negative impacts from that.

Electrical grid is just, probably, an obvious thing, but these things are arranged in like a rectangular array. I think those -- We're going to -- There's evidence that this may not be the most efficient way to arrange wind turbines. But there's cables in between all these machines. An electric substation which brings in a cable-to-shore, all buried underground or underwater, that is. There's a cable-laying ship.

We have unique waves off shore. Access becomes a more difficult issue. You can see some different examples of that. You may have heard -- I've had a few people talk to me of floating systems. There are no floating hardware designs in the United -- anywhere in the world right now. A lot of people

are interested in this. It's a curiosity for a lot of researchers. It's a real potential for future wind turbine development. But currently, there are no commercial projects. Norway is actually working on one design right now, that they claim they will put in place, but it is unlikely that we're going to see floating systems in the very near future. But long-term, yes, because deep water has a lot of potential.

Now, we're going to switch gears and get into ocean current, ocean wave and titled systems. This technology lags wind power, both in the funding that it's received and the science that's behind it. It's -- Most of the stuff that's going on right now are device -- devices, prototypes that are looking for places to actually get into the ocean and test them. It's mostly led by the Europeans, because U.K. and Ireland and places like that have a lot of ocean resource, and they don't want to ignore the resource that they have. They need -- As I said, they need a test site for doing the technology. And I'll talk more about that in a minute.

I just have a -- This is kind of a collage of different examples of point absorbers. And a point absorber is -- They call it that, because it's a buoy, so it acts like a point in the -- in the middle of the

wave. But it can generate and influence the water around it. So, as a wave comes through, it rises and falls, and through a mechanism that it has on board, it turns a generator which generates electricity. And clustered together, those point absorbers can form a power plant. Each of these systems is anchored to the sea bottom in some way, or through a fixed bottom type system. So, they'll have similar needs as a floating type wind turbine.

This is a short movie clip of a device called Pelamis. This is actually built and this is done by the Scottish. You see as it rides through the waves like a snake, the joints create the power by flexing. There's a mechanism in there that creates — that generates electricity at each of these joints.

Now, I'm talking about ocean, tidal. These are devices that look a lot like wind turbines in a lot of cases, but they run under water in currents. As I said, this technology may have nitch marketplaces in places where there are currents, but unfortunately, there isn't a lot of wide spread broad resource for this type of technology in -- at least in federal waters. However, you see there's some -- a lot of people trying these devices out in different places. In fact, this one here, I believe is being --

scheduled to be tried out in the East River here in New York.

One thing we might see before or during or in parallel with a commercial development are test sites. And we need test sites for advance the technology from where it is right now. Most of the wind energy systems that are out there right now are -- have evolved slowly from land-based systems. to really make leaps of technology, we need ocean We can only go so far testing our off-shore turbines on land. We need ocean test sites where we can do this. That involves -- This is a site in Scotland that they actually have commissioned already. The U.S. needs something, so that we can experience our worst nightmare turbine situation here, which is the picture that we do to characterize all the bad things that can happen to a wind turbine that's placed And we also need it for regulatory in the ocean. compliance and to demonstrate that we have it.

Some of the more advanced concepts. Hydrogen is one of them. Hydrogen is, obviously, not an energy source, but you can use ocean energy devices, there's plenty of water, you can use energy sources from the ocean to generate hydrogen and then, that diversifies what you can do with an off-shore

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electric system. Wind turbines of the electric grid kind of go together, but there's very little crossover between wind turbines or any electric generating source and the transportation sector, for instance. If you can make hydrogen, you can address the home heating markets and you can address the transportation sectors by making a fuel.

And finally, we have an option to combine Off-shore wind and wave devices could have synergies that qo beyond their own individual potential. In other words, wind turbines don't really If a wave generator were placed near a like waves. wind turbine, it would reduce the wave loading on the system and they would -- their combined power generation would make better use of the grid system that you could put in and make -- perhaps, make a more cost effective system. Of course, this requires the commercialization of both the wind and the -- the other technologies separately, before we can start thinking about combining them.

So, in summary, we do have near term projects, as most of you know, that pertain to shallow sheltered sites and the technology is there right now for wind turbines to go forward in the ocean, today, as they have in Europe. New technologies are going to

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be needed for deeper waters and probably, to lower the cost of the current systems. Ocean and wave technologies are really in the first prototype testing stage right now, and they need a lot more development before they can go commercial. And hydrogen production is a long-term option. I think we have to get the wind generators working and certainly, they go hand in hand.

Thank you.

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(Pause.)

Now, it's my turn in MR. GASPER: Okay. the program. Actually, it's your turn in the program. This is the part where you get to get up and offer comments on what you think the scope of the environmental impact statement, programmatic environmental impact statement should be, what should be incorporated in the analysis, what we should be looking at. But before we get into that, I would like to make another -- another plea, I quess, to promote public involvement in the EIS process.

We're conducting this program at EIS, there are going to be several opportunities for the public to get involved. We're starting it off right now with the scoping meetings. This is the third one

that we've had on the east coast. We're conducting scoping meetings around the country. There's a couple going on, on the west coast this week, too. And the scoping process started on May $5^{\rm th}$. It will run through July $5^{\rm th}$.

During that scoping process, there'll be several different ways to -- to give input. The first is going to be coming to scoping meetings, making an oral comment. Another way is to make written comments, either using the scoping form that is available at the table, the registration table, or to go to the website and make comments via the website.

The next opportunity for public input is going to be after the draft EIS is produced. There'll be a public comment period then. And we'll be making the rounds again, soliciting comments from you about what you think of the draft EIS, what sort of improvements that might need to be made in it.

As I already mentioned, there's three ways to provide comments, via the website, via regular mail, or in person at the scoping meetings.

In terms of commenting tonight, you can either submit written comments, dropping off at the registration table, or to any one of us that have name tags, and you ca -- If you have additional materials

you might want to submit in addition to your comments, studies or other information, please feel free to give those to us, too. We appreciate getting that kind of information, because we can give it to the people, the analysts who are going to be preparing the EIS, and they really like getting as much information as they can before they begin that analysis.

In terms of making oral comments tonight,

I think you had the opportunity to sign up to make a

comment at the registration table. We've got about 24

people who do want to make comments, and we'll call

you up individually to make your comment. If anyone

else decides they'd like to make a comment, there'll

be an opportunity for you to do that at the end of the

-- the period when people who have already registered

to make comments, make theirs.

We'll take speakers in order that they signed up. And we're recording all the comments tonight. We have a court reporter, and we want to make sure we get all the details that are -- that are offered. We'll be getting transcripts of those and putting them on the website, so you can view those in the future.

As far as making your oral comment tonight, we ask that you come up to the podium, state

your name, and if you're representing an organization, let us know what that is. We're asking that you limit your comments to three minutes to start out with. And also, focus -- The point of this meeting is to get information from you on the scope of the programmatic EIS. So, we're asking that you limit your comments tonight to that topic. And if you have any materials, supplemental materials to leave, please do that at that point in time.

So, having said all of that, it's time to start the -- Oh, one more -- one more thing. I've got a stop watch up here, set for three minutes. It's got an alarm that goes off about three minutes. I'm sure you'll hear that. After that happens, if you're still talking, I'll be holding up a yellow card, just to remind you. And if you continue talking, I'm going to hold up a red card. So, please try to limit your comments to three minutes. And we'll get started.

So, the first speaker on the list tonight is Robert Carra.

MR. CARRA: It will be more than three minutes. I'll work to editorialize as we go along and in the spirit of full disclosure, I wish to state for the record that, although I'm one of the co-chairs of Save Jones Beach Ad Hoc Committee --

MR. GASPER: Excuse me, Robert. Is this one?

MR. CARRA: Yeah. I think it is. the co-chairs of the Save Jones Beach Ad Hoc Committee, I speak here tonight as a private citizen. My name is Robert Carra and I reside at 17 Broadway, Gilgo Beach, New York. I appreciate this opportunity to address the wisdom of the opinions, and to ask hard questions regarding the appropriateness of off-shore wind turbines in high traffic and densely populated areas.

I applaud the Department of the Interior's Management Service for implementing Mineral implementation of this PEIS and request that fast track be abandoned now and not be revisited until the programmatic EIS and promulgation of the rules, regulations and guidelines and standards have been complete and full disclosure must be set. undertaken, with an understanding of the ramifications to diversification of energy portfolios, corporate interests and public good.

My concern tonight was to include -- was to include but not be limited to cost benefits, aesthetics, environments and safety pursuant to the National Environmental Policy Act guidelines. Though,

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tonight, I will focus on risk assessment and potential degradation of military and civilian radar navigation systems in proximity of wind turbines. I was going to go in and indicate how close some of these places might be. But since we can't talk specifics, really, we'll pass on.

Following our edited excerpts from Cape Code Times, April 20th, studies conducted by the British Military last year found that turbine blades can produce "holes in detection in air defense," in air defense radar systems, at times, causing aircrafts to become obscured from view. A March 2nd meeting was conducted where U.S. leaders were briefed by a representative from the United Kingdom Ministry of Defense about effects of wind turbines on radar there. Among the participants during the meeting were the F.A.A., various military branches and Department of the Interior.

To cut to the chase, really, I can quote a number of concerns from a number of agencies regarding the problems that occur with -- with turbines and radar, and considering ocean and dense populations with flight patterns and rescue systems. The Coast Guard sent a letter to the Army Corps of Engineers, dated August 18th, 2005. U.S. Coast Guard

requested from the U.S. Army Corps of Engineers to require the applicant to complete a navigational risk assessment, whether an EA or an EIS is conducted, regardless. The assessment should address, namely, the potential impact on navigational safety, search and rescue operations and communication radar and positioning systems.

In conclusion, really, our vast nat -- our nation's vast coastline and its immense military civilian infrastructure requires conducting a full navigational risk assessment. The New York, as an example, metropolitan region calls for the most stringent, and from Gilgo Beach, I can see the Empire State Building. Okay?

So, 9/11, here we are, possibly. A most stringent scientific scrutiny with the findings as a model for the remainder of the nation. This is not the time and place for a fast track rationale. Though, thoughts along these lines should considered hedging on criminality or insanity. What we really must do is apply strict scientific logic for this proposal, people. And it's our children, our grandchildren that need to be able to see the light of day. And pseudo-green technology, a diversified portfolio, without a master plan is not where we

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should be at. We need to look at the master plan.

Thank you.

MR. GASPER: Thank you. The next speaker is Charles Hergh.

MR. HERGH: Hi. I'm Charles Hergh and I'm a retired electronics engineer.

You know, I think the problem you're trying to solve is fuel shortages and global warming. If that's the case, renewables are not the best way to go. Nuclear energy is the better way to go. It's far more effective. It's used far more in other countries. The United States already has 20 percent nuclear energy. France, 76 percent. Lithuania, I think, is the winner with 82 percent. Japan, 35 percent. So, that's probably the better one.

All the other renewables have problems. As Walt said, the wind, the wind speed, the amount of power you get is proportionate to the cubit of wind speed. Well, guess what, the wind isn't steady, it's not constant. And even a 20 percent drop in wind speed halves the power. If the wind speed is half, you get one-eighth the power. So, that a hundred and 40 megawatt proposed Long Island wind farm, on average, will produce 28 to 35 megawatts. So, in technical terms, it's a piece of junk. Okay?

And so, there are other things that you could do, like repowering the electrical system that Many of their power plants are just Keyspan has. steam turbines. And by combining the steam turbine with a gas turbine, you could up the efficiency from 35 percent to 60 percent. That could increase the power output by 70 percent. I think, also, since you've learned about global warming, you have to also think about gas hydrates. These are found in cold seats world wide. They're in the Gulf. And they're an opportunity and a problem.

The opportunity is, of course, it's a good source of natural gas. The problem is that, they're unstable compounds of methane and water. And if the oceans heat up, or whatever they are, they're held together by the cold temperature and the pressure. If those things changed, that natural gas would shoot up into our atmosphere, to 20 times more powerful greenhouse gas, it could be a disaster.

So, I wanted you people -- individuals to favor exploration of these gas hydrates, because it just makes more sense, you know. It's a threat while they're there. We should try and control our atmosphere, control our chemicals for other reasons, but maybe, give the oil companies a fast track for

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these hydrates. I'm not talking about going into the ground, obviously, that's not it. But these hydrates are on the bottom of the ocean. If it warms up, that's a problem. So, you should do that. You should consider re-columning your grid, you know, Keyspan generating equipment, all of this would be very helpful. You know -- Oh, yeah. If you burn natural gas, it's better than You'd get one-third -- You'd cut down carbon oil. dioxide emissions by one-third. So, I quess if you have a power plant and you switch from oil to natural gas and you repower it, you could actually use 40 percent less fuel, and produce 60 percent less carbon dioxide. Okay? And so, you really ought to --MR. GASPER: Thank you. The next speaker, John Brooks, from the Save Jones Beach Ad Hoc Committee. Good evening. I want to MR. BROOKS: thank the Department of Interior and the Minerals Management Service for the opportunity to address you in regard to your quest for programmatic environmental impact for study America's outer continental shelf. The responsibility you have to determine

use and manage our coastal resources

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perpetuity, rational, unbiased and non-political decisions based upon the best established scientific research available should be your goal. No industry or corporation should be allowed to put their toes into our coastal waters without obeying established rules, regulations and building guidelines that apply to everybody. No one should get a free pass and be granted fast track status on your watch.

The projects you are talking about can affect and impact the designated significant fish and wildlife habitats in the region. A number of bird, marine mammals, sea turtles and other species habitat within all of your project areas. Some of these are categorized as threatened or endangered pursuant to both federal and state species protection laws.

The Army Corps of Engineers recently commented on the LIPA Project, indicating that their preliminary determination is that the proposed site for which authorization is sought herein, may affect some endangered species, including four species of turtles, four species of whales, plating plovers, and rosiette terns. The U.S. Fish and Wildlife commented on the same project, adding avoid placing turbines in documented locations of any species of wildlife, fish, bird, or plants, protected under the federally

Endangered Species Act. We have six species here.

The Nature Conservancy also commented,

Long Island Atlantic coastal waters are important and
should not be compromised. Critical spawning,

feeding, nursery and migratory habitats for finfish,
shellfish, shore birds, water fowl, sea mammals and
sea turtles are in these waters.

The National Marine Fishery Service has indicated that essential fish habitats have been designated throughout the aquatic portions of the defined project area for various life stages of approximately three dozen federally managed fishery resources. Collectively, these organisms rely on appropriate habitat conditions to complete proportions of their life cycle. Construction activities and operation of industrial activities can disrupt and otherwise limit the success of habitat occupation by limiting aquatic resources.

The central theme of their comment points out a vital need for further in-depth analysis of the attendant project's impact and consequences. Generally, there is a lack of rigorous information on environmental impact analysis across many important components of the project.

Releasing and permitting of any industrial

project on the outer continental shelf must be beyond reproach. Our heritage, recreational sanctuaries, and legacy for our children must not be determined by which group has the most money for lawyers and lobbyists. Any decisions you make must be honest and visionary and based on what is best for all Americans, not just a few. Thank you.

MR. GASPER: Thank you. Next speaker,
Gordian Raacke, Renewable Energy Long Island.

MR. RAACKE: Thank you. I have comments that would take much more than three minutes to read into the record, but I have them with me in written form, so I'll submit that for the record.

My name is Gordian Raacke, with Renewable Energy Long Island. I'm the executive director. We are a not-for-profit 501©)(3) organization educating the public on renewable energy and advocating for the use of clean, renewable energy sources. RELI strongly supports responsible development of renewable energy sources on the outer continental shelf. However, we can only support such development if it is done in an environmentally acceptable and sustainable manner, protecting our valuable marine life and coastal and ocean ecosystems, minimizing impacts on local and migratory bird populations and avoiding unnecessary

visual and noise impacts.

During my mental and regulatory review processes of the proposed projects, we must assess the potential negative impacts and weigh them against significant positive environmental impacts and public benefits that renewable energy projects typically provide when compared to conventional power technologies.

RELI believes that in order to meet a substantial portion of our energy demands, we must promote and accelerate the development of large-scale renewable energy projects that are commercially viable today. We must be mindful of the fact that renewable energy generation facilities must be located near or adjacent to our country's load centers as we saw on that map earlier, which are here in our coastal areas. And we must overcome, we must overcome parochial not in my back yard attitudes, in favor of public policies and projects that provide for the broader public interest.

Off-shore wind turbines, as well as other off-shore renewable energy technologies have a significant and growing potential to provide us with clean and renewable, domestic energy sources, thus, offering important tools to reduce air pollution and

greenhouse gas emissions that lead to global warming and climate change. We must recognize that off-shore renewable energy development is qualitatively very different from off-shore oil and natural gas development, which is what you deal with mostly.

First, harvesting a renewable energy source is non-extractive and does not deplete the resource. And secondly, environmental impacts from renewable energy projects are orders of magnitude lower in impact than oil and gas extraction and related activities. Therefore, we should strive to foster renewable energy development and ensure that regulatory review permitting and lease payments are designed to take these fundamental differences into account.

MMS should develop an appropriate framework and design its PEIS in accordance with existing federal laws, to ensure that the appropriate and timely development of off-shore renewable energy projects can move forward, while protecting our environment.

While developing the initial PEIS, MMS should not delay the review of projects that have already submitted formal permit applications, namely, the off-shore project here on Long Island and the Cape

1 Wind project. Rather, MMS should use the rigorous 2 environmental review process of these projects to 3 gather valuable real world experience. 4 And now, I'm going to have to skip to, 5 very quickly, to some specific scoping issues I wanted 6 to bring up. And I guess the red card is up, so I'll 7 have to hand it in, in my written remarks. Thank you 8 very much. MR. GASPER: 9 I appreciate that. Thank 10 you. 11 Next speaker, Frederick Goss -- Excuse me. 12 Frederick Goss Carrier, from Bald Eagle Power. MR. CARRIER: Good evening. My message is 13 14 very simple. My company, Bald Eagle Power, is a 15 parent company of a 501©)(3) charity and our mission out here in making any kind of project out on the 16 17 water to generate energy is based on the principle of we the people, not just an individual company to make 18 19 money or anything else. We're working together with 20 the U.S. government, sharing information, sharing techniques, sharing everything. And our program will 21 22 eventually share 50/50 with the government, whatever income comes from there of all that we do. 23 24 And the program that we have in mind is to 25 eliminate oil use in America within 46 months, and we

can do this off shore. We cannot do it on shore. With a combination of energies that are out there. The number one energy out there is the water. water is made up of hydrogen and oxygen. The next energy there is electricity, can be made from waves, winds, solar, underwater currents currents, nuclear. With all of these three -- four elements together, we can generate enough electricity out there right off the outer continental shelf to supply the whole eastern seaboard with enough natural gas put together with hydrogen, to stop the oil in the whole eastern seaboard, eventually in the United States, because this is a possibility.

Because the concept is, we have now a distribution system of natural gas all the way through the pipelines covering our nation. The idea is to use that natural gas that we have right now, convert it over to fuel cells in the home and get the natural gas. And why we're going through the EIS here is to use the off shore to get the hydrogen to eventually mix with the natural gas, so that we have a 85 percent hydrogen and a ten percent of natural gas, which will work through the pipelines without enbrittlement.

Now, this system can be done and the what the people need to do is get the whole United States

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behind it, like we did in World War II. And I say 46 months, because that's exactly how long it took for America to win World War II, from December 7th, 1941 to September 2nd, 1945, was exactly 46 months. And when America entered that war, we had nothing but cardboard cannons and rubber tanks. Well, America got together and we did it. And we can do that here. And this will end oil use in America permanently, within a 46 month period, if -- if we get together and do it.

I know that the Mineral Management Service will work out all the problems with EIS out there, so that we can work positively. Thank you.

MR. GASPER: Thank you. Next speaker,
Maureen Dolan from the Citizens Campaign for the
Environment.

Good evening. MS. DOLAN: I'm Maureen Dolan, Citizens Campaign for the Environment. Citizens Campaign for the Environment is an 80,000 member, not-for-profit, non-partisan, advocacy organization working to protect public health and the natural environment in New York State and Connecticut. We work to build citizen understanding and advocacy for policies and actions designed to manage and protect plants, water resources, wildlife and public health.

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We're very active in promoting policies and actions at the local, state and federal levels that support the development and use of renewable energy, which is derived from sources that are not depleted when used at sustainable levels. Today, we face dwindling supplies of traditional energy sources, substantial increases in oil and gas prices, and significant pollutants that have an adverse impact on human health and the environment. America must looks towards alternative energy sources to meet our rising energy demands.

We believe the development of all offshore renewable energy, including but not limited to off-shore wind technology, wave technology underwater current technology, can be an important energy source for America. However, the development of these energies must undergo a site specific, rigorous environmental review process. The process comprehensive and include must be public participation. CCE offers the following specific which need to be addressed comments an environmental impact statement for off-shore energy alternatives.

One, the review must address how or if the proposed off-shore renewable energy project will

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impact displaced wave activity, including size, force and frequency of the activity.

Two, studies should be done to characterize the bottom lands of the intended location of a proposed project. In specific, the productivity of these bottom lands as they relate to commercial and recreational fish and shellfish harvesting, as well as providing habitat for marine life. EIS should look at a short-term and long-term effect.

Three, the effects of increased or decreased sand deposition caused by energy infrastructure. Sand deposition is critical to Long Island's very beaches and as well as so many other coastal areas.

Four, any possible reef effect that might occur around the infrastructure. The study should include both the pros and the cons of an artificial reef system as it relates to the specific species and to the local economy.

Five, the substantive bird migration pathway surrounding the proposed location of any project. Bird surveys should be conducted for each project. The EIS should evaluate both positive and negative effects that the renewable infrastructure might have on the bird population. These effects

should be compared to the impact on birds caused by emissions from fossil fuel generating facilities of equal energy capacity on land.

Six, an assessment of the environmental and public health benefits as compared with the fossil fuel plan of equal generating capacity. assessment should include any positive effects on air quality and any displacement of fossil fuel production. This should also include an assessment of whether the proposed location meets the federal air quality standards for ozone and fine particulate matter and how the renewable energy might affect compliance mandatory federal health to these standards.

Seven, an assessment of any potential impact to horseshoe crabs of the Atlantic coast. The horseshoe crab habitat ranges from Maine to the Gulf of Mexico, and most of them from Virginia to New Jersey. Adults spend fall and winter at the bottom of these or on the continental shelf.

Eight, an assessment of the migration patterns for marine mammals, including but not limited to whales, dolphins, seals and sea turtles.

Nine, the EIS should assess whether the project helps to meet state, regional and national

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1 regulations, codes or laws. This should include any 2 state renewable portfolio standard, any executive order, or participation in regional initiatives, such 3 4 as, IGSI, local government for sustainability, or 5 REGI, regional greenhouse gas initiative. Ten, the EIS should address any positive 6 7 or negative effect the proposed project would have on the economy. This should include tourism, commercial 8 9 and recreational fishing and beach activities, and any -- And EIS should include ample public opportunities 10 11 in the form of informational meetings, public hearings 12 and public commentaries. Thank you. MR. GASPER: Thank you. Oh, great. 13 14 you. 15 Next speaker is Patrick McGloin Okay. (ph.), Nassau Hiking and Outdoor Club. 16 17 Okay. Thank you. Next speaker, Ernest M. Fazio, Long Island 18 19 MBA. 20 MR. FAZIO: Good evening. I'm Ernie Fazio 21 and I'm the chairman of the Long Island Mid-Suffolk 22 Business Action. We're an organization that advocates the 23 24 building of infrastructure that will decrease 25 pollution and increase efficiencies. And in this

case, it's -- the issue is reducing pollution because of the generation of electric power. So, while I'm not expert enough to tell you that this is a good project, or a bad project, we -- I can be reasonably assured that it's not going to be producing any air pollution.

As far as the marine life is concerned, there seems to be some people who think that this might have an impact on the marine life. It certainly will have an impact, but it will be a positive one. Being a bay man and a Coast Guard -- Coast Guardsman at one point in my life, I know how much the sea life likes to be around structures, and they create a feeding point from the seaweed, barnacles and other sea life that attaches itself to these kinds of structures. So, it actually is beneficial, and someone would have to show me some real information to change my mind on that.

There seems to be some concern about navigation. Again, from my Coast Guard experience, if you can't miss this one, you probably shouldn't be in a boat. So, I'm not -- I'm not concerned about either of those issues. And I'm -- I'd like to see this process go forward. I'd like to see all of the information that can be developed prior to it being

built. And I look forward to seeing what the final results are. But I think I'm going to be on the side of this thing being built all along. But at the moment, that's where I am. Thank you. MR. GASPER: Thank you. Next speaker, Walter Arnold, from the Save Jones Beach Ad Hoc Committee. My name is Walter Arnold. MR. ARNOLD: I'm one of the directors to Save Jones Beach Ad Hoc Committee. I'd like to thank you, MMS, for conducting these hearings. I wish we were really a part of them. We don't agree with your decision. Now, what I really want to talk about is cost benefit. What's going to happen with this process and then, any process further that looks at I see those pictures of our coast. gentleman describes the coast beautifully. Population centered around the coast. The real estate which we've tried to discuss in our local problem, and we're told that you're nimby if you discuss the height of these things and the view of these things, which in

In real estate, Manhattan Beach, California, if the person is concerned about his two

real estate, ladies and gentlemen, view is big.

a very, very big factor.

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million dollar property. Like a couple in England that lost 20 percent in a court of law. What's the impact? These people are putting up LLC corps. It's not Florida Power & Light you're dealing with. You're dealing with a limited liability corporation. This whole system is -- really has to be reviewed.

In our case, we have a public beach, Save You have ten million visitors a year. Jones Beach. They don't come here to see windmills. They come --We're having a naval air show this weekend. Probably, I don't know, a hundred thousand people, they don't want to see electric factory in our waters. What impact on the two coasts, I would like to know, from all the way up and down California, Alaska, anywhere, are people going to come to see windmills, or come to see what they've tried to just the beautiful coast that they're used to seeing? How will it impact tourism, which in our case is, I don't know how many millions of dollars on Long Island. Property value is in the billions on these coasts.

This is a great, great deal for the developers, only. The people who benefit from this are only one entity, the developers. Denmark, which you cite and you put all these pictures up, it looks like Steven Spielberg. Where in Denmark in 2004, the

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head of Enson Energy has declared, no matter how many windmills they have, I do not improve my greenhouse gases. Somebody has to look at the science and engineering of this, not some public relations company saying, Oh, these things will fuel 44,000 homes. It doesn't fuel 44,000 homes, except name plate.

So, it has to be done in a manner, and I don't know, we had kind of hoped that we would start to see this process here. I don't know how this will -- So far, we have the entire administrative record of what's been done by our local authority. There's no questions answered to the United States government agencies, on a whole bunch of questions. It's not the subject of this inquiry, or it requires further study. is unacceptable, this whole thing. This Unless somebody analyzes this and does this, you're going to have a tremendous problem. The cost of these things are five to anywhere in the world ten times conventional power plants. We must repower our power I don't know. Thank you. plants.

MR. GASPER: Thank you. Next speaker, Michael J. D'Amico.

MR. D'AMICO: Thank you. My name is Mike D'Amico. I am a citizen of the United States, currently residing in Massapequa, New York. And I

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wish to open by thanking Mineral Management Services for undertaking this very critical and important first step regarding off-shore renewable energy, and allowing me the opportunity to speak here tonight.

In the spirit of full disclosure, I wish to state at the outset that I stand before you tonight wearing two hats. One is a consultant to the Save Jones Beach organization, a not-for-profit that you've heard mentioned here earlier. I also stand here citizen, tonight as а private exercising his democratic rights. And it is from this position that I speak now and wish the formal record to reflect.

At this stage, I neither promote nor oppose off-shore renewables. To me it is too early in the process to do so. I will be submitting more extensive formal comments in writing, with the --within the required time period. But for the sake of brevity, I will touch only on a few points here tonight.

It is critical to me that, we begin this undertaking by setting our standards as high as the bar will allow, using the best available science to the maximum extent that the laws of this nation will allow. Anything short of that will not suffice and will prove detrimental to us here and now, and also to

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future generations.

Two, I fully disagree with the former Secretary of Interior, Gail Norton's interpretation of Section 388 of the Energy Policy Act of 2005, and the language that allows two proposed off-shore industrial wind plants, Cape Wind and the Long Island off-shore wind plants, to be fast tracked. I have formally protested this matter in the past and will do so again here tonight. It is putting the proverbial cart before the proverbial horse. And it takes away the level playing field that the National Environmental Policy Act affords us, and casts a shadow over this whole exercise, and tarnishes the process.

I also call on any elected official here in the audience tonight to please investigate this matter. I do not blame Mineral Management Services for what's happening. I do blame political appointees and those that put them there for allowing this to happen. Mineral Management Services, in my mind, you're in a tough spot.

Three, a full ecosystem and multiecosystem approach should be undertaken for this
programmatic environmental impact statement, and
incorporated into each individual proposal. This
approach should take into consideration all direct,

secondary and cumulative impacts of all recent past, present and future foreseeable actions, both within the sphere of off-shore renewable energy, as well as those that are outside of it.

Much of this information already exists within the Department of Commerce Noah's Division and also, the United Nations is readily available and will be incorporated into my comments when I submit them in writing.

Four, when it comes to our wildlife in these industrial scale proposals, I encourage you to require that the best available technology and science be applied with the least invasive means as possible. For example, we can set the bar low and allow proposals, proposal applicants to do aerial and bird surveys, lambast radar and literature searches that will give us count of avian species passing through the sweeps of rotors, or windmill generated devices. Or, we can raise the bar to its highest level and set up jack-up barge platforms equipped with radar equipment to do recordings 365 days of the year, 24 hours a day, seven days a week, as has been called for by our U.S. Fish and Wildlife Service.

When the aforementioned was applied at Cape Wind, a count of 210 targets through the sweep of

the rotors was estimated. When the jack-up barge platform was set up, the count jumped up to over a hundred and 27 thousand targets passing through the same area. If we set the standard so that they must use the most up-to-date methods, we will go a long way to ensuring that the wildlife we share this earth with are given full consideration before any proposal is And I for one do not want to hear of any permitted. applicants complaints that to do by using the highest standards available will cost money and cut into their profits. They're using federal lands and federal It's the common property of the people of resources. this country. And they should be required to pay so accordingly.

Five, I am a former central fish habitat advisor to the Mid-Atlantic Fishery and Management Council, and did that from 1996 up to 1998 for the establishment of a central fish habitat, that there be no development happening in any area that is designated a central fish habitat by the Department of Commerce. Fish are part of the make-up of the food and fiber of this nation and should be allocated the fullest protection to the maximum extent possible, and are vital to our national security. I can eat fish, but I can't eat electricity.

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Finally, it is my understanding that Congress mandated you, Mineral Management Services, this charge of administering this aspect of our future, but did not give you the funds to do it properly. If that is correct, I call on every elected official and citizen here tonight in this audience, to join me in reversing that and to give this agency what it needs, so that they may do a proper job of balancing the needs of the environment against the needs of our economy, for they are both intricately linked. Thank you again for this opportunity.

MR. GASPER: Thank you. Next speaker, Laurie Farber, from the Sierra Club Long Island Group.

MS. FARBER: I'm Laurie Farber. I'm the conservation chair for the Long Island Group of the Sierra Club, and I'm going to skip some of what I have here just to keep in the time limit, if possible.

We think it's very important that any permitted alternative energy production be explicitly to displace existing fossil fuel uses, otherwise, don't bo -- we don't reduce our we dependence on fossil fuels and just continue encourage our wasteful way. And I think that's what this is all about, anyway. The Mineral Management should require an applicant Service to include

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rigorous reviews of the construction procedure, as well as removal at the end of its useful life. Applicants should be required to put funds up front to bond for the decommissioning and removal of any structures, and restoration to original conditions.

We should look at cumulative impacts. We think that's very important, because sometimes we miss quite a lot, knowing that there's going to applications for a lot of different things in similar areas. When rigorous study or previous study shows an is sensitive environmentally, the Mineral area Management Service should not make energy production priority devastating irreversible over or environmental impacts. It should require that the least impacting technology be chosen, when more than one application or option are presented. important that areas of essential fish habitat, critical bird habitat, et cetera should be identified and removed from consideration for development of any energy facility.

Many of the energy facilities to be proposed are anchored to the sea bottom. We need to understand how this can impact on literal drift, the on-shore/off-shore movement of sand that may be critical to maintaining barrier beaches. We should

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recognize the states' coastal zone management plans and look at any impact on ocean currents, weather, or surface water movements. In cases where drilling is required, for example, for transmission cables, it's important to require an examination of any local aquifers or lenses of fresh water to determine is penetration will have an impact on the fresh water supply. For most of our barrier beaches, there's a lens of fresh water underneath and people who live there in facilities on those islands generally rely on that small supply of fresh water for living.

It's important that we study the avian activity along our shores. Where there's a project proposed in the general vicinity of a major migratory fly way, such as the east coast, then, Mineral Management Service should require multi-year, 24/7 radar studies done at the project site and height to thoroughly examine the impact. Many of our neotropical migrants fly at night in large numbers, and the only way to pick them up is on the site at the proper height, to find out what's really going on. And I can tell you from first-hand experience, that I've banded birds at Fire Island for 20 years. Bird migration is not the same from year to year, or from

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week to week. There were weeks when I could barely manage to keep one or two miss nets open, and days when I would spend most of the day photographing flowers and insects. And I can assure you that the data that the U.S. Fish and Wildlife Service has from the 20 years that I spent there is quite incomplete, because we all had other jobs. We were there as volunteers. So, it's important to realize that, a lot of days, there were no data.

and we need to also look at what kinds of lighting.

U.S. Fish and Wildlife Service can recommend that. I

think we also need to look at the pelagic birds. We

have quite a few oceanic birds off our coast, as well

as birds like terns that fish off our coast. And we

need to examine whether structures anchored to the sea

bottom are going to impact on their feeding behavior,

diving behavior and predatory impact. I just wanted

to mention, also, Monarch butterflies migrate.

And in short, it's important, I think, that if the EIS shows a project has great environmental impact that the permits should be denied. Thank you.

MR. GASPER: Thank you. Next speaker, Neal Lewis, from the Neighborhood Network.

MR. LEWIS: Good afternoon. Neal Lewis, executive director of Neighborhood Network. to begin with the question, multiple use management. I think that the EIS that you're working on should look at the question of whether wind energy and wave energy projects could be co-located at similar sites, whether there's advantages to that, either as was shown in your PowerPoint of them being in the same structures, or just being near one another. would like to ask the question to be looked at, that I've been told wouldn't work, but I, nonetheless, would like your expertise to look at the question of whether solar PV could be added to other renewable technologies to help compensate for, let's charging batteries to run lights and things of that nature. So, could PV be added to a wind turbine, for example, for that kind of use?

I think in terms of alternative use, we should look at having a policy that says permissive as allowing educational possible towards uses. Universities should be able to come these structures, to be able to studies related to the structures, themselves, or to do studies related to the marine environment, perhaps, working off of the I think recreational and boating should structures.

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also have as permissive as reasonably appropriate. I think there's too much of a tendency towards attempting to say, let's just prohibit everything. Anybody that's been a boater like myself, knows that people operating boats are accustomed to coming close to structures and can do so in safe manners. And so, we shouldn't operate on the assumption that we need to cordon off these areas, but instead, should allow such uses.

In regards to boats, one of the goals here is to promote alternatives to our reliance on oil and I think we should look at a policy that natural gas. speaks to a question of the efficiency of the boats that are used to maintain these structures. know, anybody that's owned a boat, how much oil and petrol in general that they use to run the boats. There is a lot of technologies for props and motors and such that are much more efficient, and yet, they don't seem to be making their way into common use. think it's appropriate, since the purpose behind these structures is to promote alternatives to oil. We should be talking about making the boats as efficient as possible, and combining that with the overall projects.

I think the question of locating things

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like wind turbines in deeper waters should be looked at in your analysis, within reason, I assume, but nonetheless, saying 60 or 70 feet is the limit, is something I'd like to hear that analyzed more scientifically.

The question about the European experience. I think it would be very helpful if your scientists and experts were perhaps able to give us some information and set the record straight. There's a lot of misinformation about all the turbines falling down in Europe. And it would be helpful if, perhaps, you could set the record straight on that.

In terms of homeland security, I think there's an interesting possibility to make use of these structures to include video or other electronic equipment that may help to keep an eye on shipping lanes. And I think that that possibility should be explored, as an additional benefit.

I think in terms of multiple companies, private, public, there should be some discussion of whether a private company gets the same status as a company that's worked through a public process, or a public company such as the case is in our proposal.

And lastly, I think Neighborhood Network from day one and our position on this issue has always

1 made it clear that, we need to have scientifically 2 rigorous EIS's done for this particular project, and 3 the same thing should apply in your analysis in terms 4 of what you say for all the other projects that would 5 come forward in the near future. Thank you. MR. GASPER: Thank you. Next speaker, Bob 6 7 Link from Winergy Power LLC. MR. LINK: I'm sorry, I have my back to 8 9 you, but I'm here to talk to these people. I want to 10 thank you so much for coming to my home town of Long 11 Island. I've got a few points I'd like to make. 12 Energy is fundamental to our society. 13 powers our homes, our hospitals, our cars and the TV, 14 where I can watch my Met games, the important things 15 in my life. The scope should take into consideration 16 17 a fair and balanced comparison to generation that 18 exists now, such as, the Brayton Point Power Plant, 19 using a billion gallons of water a day for cooling. 20 As compared to wind turbines, using no amount of 21 When that comes into place and the fair and 22 balanced analysis is done and is laid out in the 23 scope, it will make for a better document. 24 Number two, the European experience has

shown, because all of those sites in Europe are test

or demonstration projects, pilot projects, per se. They've all been pilot projects. They've been pilot projects since they were started. Nothing has been set up as a commercial project yet, and will not be until Horns Rev adds another 80 turbines and Nystad, adds another 72, then, they will analyze it and go from there. They did one year of good baseline work, and they're doing constant monitoring. I think that would be appropriate within the scope.

Now, this is Bob Link personal, not Bob Link working for Winergy Power. I think if you ask Cape Wind or LIPA if they were being fast tracked, I think they would say no. They've expended, between the two of them, in excess of 30 million dollars over a period of five years. That's not fast tracking. And as the gentleman said before, electricity and The world is losing 28 million metric tons of fish. I've made my living off the coastline. fish. lose 28 million metric tons of fish every year. don't know if anyone knows what that is, but 10,461 pounds of fish every minute of every day. fish should be saved.

I also think that endangered species should be addressed appropriately for one year. I sometimes consider myself an endangered species. I'm

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1 bigger than most seals. And I swim at Jones Beach. Last but not least, I think electricity is 2 3 important. It's important if I'm going to eat fish, 4 because it helps me pack it. It helps me freeze it. 5 And it helps me cook it. Have a great day. Thank you 6 very much. 7 MR. GASPER: Thank you. Next speaker, Tom Vanderberg from the Save Jones Beach Committee. 8 9 MR. VANDERBERG: Thank you. My name is 10 Tom Vanderberg, and I'm a resident of Amityville, Long 11 Island and a member of the Save Jones Beach Ad Hoc 12 Committee. While the committee, like most Americans, 13 14 are in favor of developing renewable energy, we are 15 adamant that the hard questions be asked and answered, especially before places such as public parks are 16 17 subject to industrialization. We applaud the Mineral 18 Management Service for proceeding with this 19 programmatic EIS and to establish comprehensive 20 framework to address such questions. 21 I was going to speak about the fast track 22 issue, but in three minutes, I'm going to have to skip 23 that just to say, there's no reason for it. There's 24 no rationale for it. There's no emergency here that

needs to be addressed. And I do fear that the fast

track issue is just going to generate litigation, that's going to slow everything down and be against everybody's interest, no matter where you are on the issue.

Moving on, I want to talk about the factor of aesthetics in terms of the scoping hearings. Congress with the passing of the National Environmental Policy Act identified critical areas of when reviewing such projects as concern specifically, including the preservation of aesthetically and culturally important aspects of our national heritage. And so, Ι really probably shouldn't even have to say this has to be part of our scoping. Unfortunately, at least around here, anyway, proponents -- proponents of such projects like wind have worked hard to do with the aesthetics, what conservatives have done to the word, Turning it into something shameful, out of liberal. step, something to be given short shrift. it sound like some namby-pamby concept, not worthy of consideration. Or, they make it sound like it's purely a nimby issue. That's not the way Congress saw it, and I hope that's not the way that MMS will treat it.

In particular, when you're developing the

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programmatic EIS standards, I hope that MMS considers that the value importance of the aesthetic impact is especially important where public lands and parks are involved. There must be a presumption against allowing any aesthetic impact upon municipal, state and national parks that have been set aside for public enjoyment and to be held in trust for future generations. That presumption should prevail, absent critical and compelling reasons for the forfeiture of our enjoyment and their heritage, and the exhaustion of all other options and alternatives.

There must be an even higher standard with regard to places listed in the National Registry of Historic Places, as is, for example, Jones Beach on the Ocean Parkway that runs between Jones Beach and Robert Moses State Park. Such historically and culturally significant places must be protected against adverse effects as a matter of law. And for front parklands, the view shed aesthetics, it's really the whole point. The beaches are staged in the sea as a performance. Industrialize that view shed and the essential character of these parks is altered, blighted and ruined.

Obviously, the closer to shore project is allowed to be sited, the greater the impact. Where

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public lands are affected, the costs of moving the project further out to a benign area and any resulting consequences to the profit margin or convenience of the developers should not be allowed to overcome the mandate to preserve and protect what's in the public trust.

Places like these deserve are, in fact, required by law, to be preserved in their natural and historical significant state and should be, per se, off limits to energy companies who choose such sites, looking for maximum visibility and exposure in order to be front line for subsidies and tax breaks. Whether it's Jones Beach, Arcadia National Park, Nantucket Sound, Cape Hatteras or Key West, the programmatic EIS should create a presumption against they being chosen as appropriate sites, should mandate the highest standards possible, to prevent adverse impacts and that alternate benign sites be exhaustibly examined and required. Thank you for listening.

MR. GASPER: Thank you. Next speaker, Nancy Solomon from the Long Island Traditions.

MS. SOLOMON: Good evening. There are a number of procedural considerations that apply to the other off-shore wind parks that are being considered under the programmatic EIS, and I'm going to address

those first. But I also want to mention that we do hope that there will be a second consideration over the exemptions granted to the two projects here on Long Island and the Cape Wind project. I understand that it is federal policy to grandfather projects in. However, both of these projects are at the initial review stages and therefore, we feel very strongly that there should be the same review process applying to all of the off-shore wind projects, regardless of when the review process began under a different agency.

The first impact that I feel having documented fishermen here on Long Island over the last 20 years, is that there are going to be a systemwide impact to the fishers in other coastal areas. I strongly encourage you to consult with the National Marine Fishery Service and U.S. Fish and Wildlife Service in developing the programmatic requirements for the impacts to that resource, both from a social impact analysis, as well as from a marine analysis.

There needs to be in this review process thorough ethnographic studies, including on-site views with local fishers and the impact in the proposed areas, as well as benthic analysis of how it will affect -- as some of my colleagues mentioned before,

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as well as the potential impacts it can have to the marine wildlife, as well as to the avian wildlife. To date, we know that there are serious gaps in this information, both under the Magnuson Act, as well as other regulatory review process for these natural resources.

The second question concerns the cultural impacts to these off-shore projects, and we encourage you to, again, look at some of the National Park Service guidelines under the Section 106 review process, and how that will all affect the occupational culture of the fishers, as well as other related industries that depend on the ocean and the marine environment for their livelihoods.

We understand that there are probably other national register shipwrecks in some of the proposed areas, and there needs to be an analysis of siting issues as to how they would affect those resources, including, again, the recreational industries that have come to depend on visiting those shipwrecks.

Although I'm not totally familiar, I understand that there are guidelines for understanding impacts to landscape and scenic resources that should be undertaken for these reviews. There's been an

active discussion recently in the cultural resource management community on how to identify those resources.

Lastly, I would ask that there be a serious discussion of the mitigation measures that should be analyzed in terms of the impacts that will inevitably become to be the affected stakeholders, both on an economic, as well as a educational level. Thank you.

MR. GASPER: Thank you. Next speaker is Dennis Quaranta from Winergy Power.

MR. QUARANTA: My name's Dennis Quaranta. I'm president of Winergy Power. We are all here to assist in any way we can to facilitate the process of setting up your scope. One thing we think should be considered that will affect all developers of offshore renewable energy conversion systems is that, MMS as the lead federal agency under the Energy Policy Act of 2005, Section 388, should engage at the earliest possible moment, the state agencies and regulatory bodies that manage the state coastal zones.

In New York, for example, there's something that's called an Article 7, that applies to the permitting of transmission cables. New Jersey has a similar regulation, as all other coastal states. In

New York, a developer is required to obtain a certificate of compatibility to bring their cables ashore. In New Jersey, they are required to get a certificate of coastal zone consistency. Each coastal state has their own form of coastal consistency requirements.

We believe that it is imperative that these issues are addressed in the beginning of the scoping process and that all relevant state and local agencies are included from the onset of the scoping for any project that is proposed. We further believe that this inclusionary style of deliberation in keeping with the letter and spirit of the NECRA permitting process. Thank you.

MR. GASPER: Thank you. Next speaker, Richard Schary.

MR. SCHARY: Thank you. About two, three years ago when I first heard of the Long Island offshore wind factory project, I was told that they were talking about 30 to 40,000 windmills all up and down the east coast, and I said that's not possible. And I later found out, they were all supposed to be off public beaches to lessen the opposition. And basically, what I'm hearing tonight, it might be possible, you could have 30 to 40,000 windmills,

whether you're in favor of them or not.

It seems to be that, this is where this committee -- this group is going, this particular EIS. You kind of gave short shrift to the other technology when you gave your little presentation, because, quite frankly, I think this is steered towards one goal, and it's definitely not something that I thought I'd hear tonight. I didn't know what to expect tonight.

The other technologies are not there yet, so this is basically about wind power. And the fact that Texas has a 10.3 boundary for their state limit in the off-shore area, maybe, we should try to get that in New York, so we'd have more control, cause these power cables do have to come ashore at some time.

Now, why not have an EIS for all off-shore projects? How about broad water? How about floating barges? Why not have an EIS for that? Why not have an EIS for future oil and gas terminals or projects in the ocean? Why not just this? This seems to be steered toward one goal, again. We have directional drilling and it's possible, that if gas is found 30, 40 miles off the coast, you could have oil wells on land and drill outward. I think this should include all off-shore projects, not just wind factories.

And the fact that LIPA has got a special exemption, Cape Wind and LIPA have this special The fact it was done exemption, is very troubling. without competitive bidding invites a lawsuit. I'm sure it's going to be in the courts now. have a former U.S. senator being paid large amounts of money to lobby, to get something exempted, lobbying the Congress, suspicions are certainly roused. now, off-shore wind factories get federal and state tax credits. They get accelerated depreciation. get pollution credits. And all these credits come out The taxpayers pay the big businesses. of my pocket. They pay the corporate welfare. The taxpayers pay FPL. They pay Goldman Sachs, who now is in the windmill business. They pay GE. And all these things are done by large corporations, and the only color money that they seem to respect -- The only thing they have about the environment that's green, is the color of money.

And the fact that I'm standing here before the Interior Department now, this is the same Interior Department that is permitting thousands of gas wells out west, and the same Interior Department that is accelerating logging in our national forests and accelerating logging roads, trying to get rid of the

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1 Endangered Species Act, now, they're three miles off 2 my beach. I am very suspicious. And I'm going to 3 say, again, follow the money, cause that's what this It's about the money. Thank you. 4 is about. 5 MR. GASPER: Thank you. Next speaker, Philip Healey from Biltmore Shores Civic Association. 6 7 MR. HEALEY: May I ask you some questions? Is that possible? 8 9 MR. GASPER: The purpose of this --10 Before I file my statement, MR. HEALEY: 11 I just didn't understand a couple of things that you 12 had in your presentation. Ask you a question that you 13 feel appropriate and you can answer. 14 When you mentioned your draft EIS that's 15 going to come out in February of 2007 -- You mentioned your draft EIS is going to come out in 2007. 16 17 there's a rule, it comes out simultaneously? What is 18 that rule? What does it do? I don't understand the 19 process of what that is. 20 We're developing a regulatory MS. ORR: 21 regime that will govern how we permit these projects. 22 And that will come out at about the same time. describing the regulatory regime. 23 The programmatic looks at the environmental and socioeconomic 24 EIS

impacts associated with these sorts of projects.

two things will come out at about the same time.

MR. HEALEY: Okay. So, will your EIS be a separate EIS that's going on, than what a private company is proposing to do now, or a project that's going on now? So, it's two different entities and they don't overlap, or -- or work together; is that correct?

(No audible Response)

MR. HEALEY: Okay. All right. I'm ready when you are. Go.

Again, my name is Philip Healey with the Biltmore Shores Civic Association in Massapequa. We are -- our position down in the community there, that no project should be fast tracked. We hope that all projects will follow after your guidelines are set up, like any other project will be counted anywhere. We also hope that -- We don't believe that a date of 2007 to do a social economic impact and how it's going to affect our tourism, our local activities, our bay activities, our recreational activities is enough time. There's no way you can understand how the whole system works here in that amount of time.

We also hope that in your EIS or your programs, guidelines you're going to set up, that you understand -- look at what it takes to maintain these

structures, so they're working all the time. Is the company able to facilitate -- Are they able and willing to facilitate the proper maintenance of them, and what does it protect us, so that these things aren't just sitting there, doing nothing, collecting subsidies.

On the subject of subsidies, we'd like you also to consider if the subsidies were eliminated, would these projects be viable? And if these -- That it ties into the economic viability of the project.

Again, we're under a misunderstanding. We had hoped that your guidelines and your EIS would be -- would set the standard for the off-shore project being proposed now, but a misunderstanding here that, the two don't -- there's no crossover on those. So, that's unfortunate. We had hoped that you'd hold the position that no project would go forward without your guidelines, first. Thank you.

MR. GASPER: Thank you. Next speaker, Sashe Annete, U.S. Green Building Council.

MS. ANNETE: I'd like to thank all of you for being here and for the quality and level of comments and concerns in the room. I would like to thank Minerals Management for this series of public meetings. This is my third. I was able to attend the

meeting in Washington and the meeting last night in New Jersey.

My name is Sashe Annete. I am an environmental media strategist. I'm a member of the U.S. Green Building Council, New Jersey Chapter. And I work directly with the Board of Public Utilities. I have a production company that is currently focusing on producing events and concert events, specifically, to raise awareness and funds for renewable energy organizations.

As a resident of Monmouth County, New Jersey, and one who actually grew up here on Long Island I have obvious interest in how this policy developments and the potential future of off-shore wind farms, not only in New Jersey or Long Island but throughout the entire northeast and ultimately, the world. We live in a densely populated coastal area that is particularly vulnerable to the devastating effects of global warming. The northeast corridor is probably one of the greatest energy drains on our national grid. We are vulnerable to rising energy prices. We re vulnerable to shortages and blackouts. And we are vulnerable to terrorism.

Wind technology has been used on this planet since ancient times. There is no reason that

we should not fully take advantage of the technology now available to us, to implement natural, clean renewable source of energy. look at the widespread use of renewable energy projects, particularly in Europe, it is nothing less than shameful that we as a nation and as a global leader are so far behind the rest of the world on this Europe, for example, has obviously overcome issue. the obstacles of costs, aesthetic and environmental impact and technology challenges. We must follow their lead. And there is no reason why we cannot leapfrog, so to speak, off of their experience, and the obstacles that they have overcome in this process.

An interesting question is, why are they so far ahead of us? I suggest, it is a matter of consciousness. The consciousness of a people affect the consciousness of a government and vice versa. They have faced higher energy costs and pollution and environmental concerns for many years. We seem to have forgotten the energy crises of the 1970's, and we are facing much more devastating consequences if we do not make some serious, long-term changes, and quickly.

I well understand the need to develop the EIS and the valid concerns that are raised, that deserve to be addressed, but not over 18 months. So,

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I challenge all involved parties on the research, technology and policy levels to get onto the same page and develop a new paradigm for pushing this policy through and be creative about, you know, possible, simultaneous, you know, don't wait to start phase two because you haven't gotten all the information yet from phase one. There is viable information out there from our brothers and sisters in Europe.

I'm actually representing two other colleagues, so I would ask you for just one more minute, if I might. Thank you.

So, on the issue, I well understand the Jones Beach concerns. I grew up on Jones Beach. You will not have a beach if the continued effects of global warming continue to devastate our coastlines. On the tourism issue, I stood in San Bernadino Valley, in the desert, in California. The wind farm there is stunning. And granted, Europe has a different aesthetic sensibility, perhaps, than some Americans. But I don't think anyone is sitting in a café waterside in Denmark complaining about the view. I don't think that tourists on this coast will say, Oh, honey, look at that disgusting turbine. I think I'm going to be sick.

I happen to work very closely with the

1 mayor of Belmar, New Jersey, which is one of our 2 biggest tourism towns. They have a beautiful boardwalk and we're actually producing a concert there 3 4 for him this summer. And he has no problem with the 5 tourism issue. I'll cut to the end. The real 6 7 challenges here are issues like the interconnect and 8 the deep water foundations and costs. Let us not 9 time issues that waste on have already been 10 effectively addressed by our neighbors, who 11 implemented this technology. Where we stand now is 12 like having a high contrast MRI machine --13 MR. GASPER: If you could draw that to a 14 close, or defer your comments until after --15 MS. ANNETE: Okay. -- the rest of the speakers. 16 MR. GASPER: 17 MS. ANNETE: I would be happy to do that. 18 I don't think we have a choice but to fast track this. 19 If you look at Darfur and Nigeria and Iraq and the 20 merging threat of Iran, we cannot compare those 21 threats to the issues that we're facing here with off-22 shore wind. I think I made it clear that I was 23 24 actually representing two other colleagues, so I did 25 ask for another minute. But I will -- I will defer.

1	Thank you very much.
2	MR. GASPER: Thank you. Next speaker,
3	Joseph Kracovich, president, Old Lindenmerie Civic
4	Association. I apologize for butchering all of that.
5	MR. KRACOVICH: I object to a two hour
6	audience prep and my three-minute time limit.
7	MR. GASPER: Could you Could you state
8	your name?
9	MR. KRACOVICH: My name is Joseph
10	Kracovich.
11	MR. GASPER: Thank you.
12	MR. KRACOVICH: Cape Cod and the Jones
13	Beach project should not avoid the rules and
14	regulations that the scoping sessions are designed to
15	address. Please avoid any historic sites, public
16	beaches, recreational areas and pseudo-science.
17	How can you do a national a nationwide
18	EIS in six months? Find out if the technologies and
19	projects that you're dealing with actually work? Do
20	a cost benefit analysis on each project and all of the
21	expected projects, together?
22	Everyone's looking for the same thing, no
23	risk, deduction tax credits, subsidies. There's 5,000
24	megawatts of wind power on application with the New
25	York ISO now. What are you going to do and how is

1 this going to affect the nation as a whole? 2 Please avoid the unqualified award of any 3 production tax credit. The public should not be 4 forced to subsidize institutionalized fraud, corporate 5 welfare, or non-viable supply site electric generation. 6 7 MR. GASPER: Thank you. Next speaker, 8 Daniel Zaweski, Long Island Power Authority. 9 MR. ZAWESKI: Hi. Good evening. My name 10 is Dan Zaweski. I'm with the Long Island Power 11 I appreciate the opportunity to present Authority. 12 some of our thoughts on your programmatic EIS tonight. 13 I'm trying to keep it relatively brief here to my 14 three minutes. 15 As you are aware, the Long Island Power Authority in conjunction with Florida Power & Light, 16 17 had promulgated the Long Island Off-Shore Wind Project 18 and we're working on that now. Our comments here are 19 based more on the programmatic EIS that you're seeking comment on. 20 21 First, I think we want to state that is it 22 our understanding that, your programmatic EIS in no 23 way, shape or form is going to diminish or dilute the 24 requirements of each project to go through the

National Environmental Policy Act and to be subject to

those rigorous studies.

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From our perspective as a utility serving load, we're struggling right now with the need to diversify our resources, remove some of the continued fuel pressure that is causing us to continue to increase the cost to our customers on a kilowatt hour basis. And also, to start moving towards some form of energy security.

With regards thoughts the to on programmatic EIS, a number of concerns and thoughts that we have start, really, with the body of knowledge that's out there already, and we would -- we would suggest that those resources that are available, that have developed from the past 16 years of studies that conducted off-shore have been on the various installations that have taken place in Europe, be brought into your programmatic EIS to the extent that they can be.

Number two, in looking at future requirements and recognizing the costs of off-shore studies, compared to those on-shore, that, where possible, comparative results that have been developed for on-shore purposes be utilized.

Number three, we'd ask that in your development of the EIS -- I don't know where this

echo's coming from. I apologize for that. In your development of the EIS requirements, you look at the current requirements that are in place for siting existing fossil based generation resources, which have been developed now to a point where all necessary issues are -- are studied and evaluated, but that do not put an undue burden or an over burden to go beyond that.

Last but not least, we think it's important as part of your environmental impact studies to keep in mind that, any form of generation that's going to result in electric generation, that's going to have a need to interconnect to an on-shore grid, that some consideration be given to the ability for those projects to interconnect to the grid.

Thank you for the opportunity to address you this night. And thank you for moving forward with this.

MR. GASPER: Thank you. Next speaker is Ian Kelly, Winergy Power.

MR. KELLY: Good evening. I'd like to thank you for coming all the way to Long Island to take public comment. Looking around the room, it seems that I am actually the youngest face here. My generation, I believe, has the greatest vested

interest in what the rules and regulations that you'll be setting up tonight.

I ask that then you are forming the regulations and scope -- entering the scoping process that you look at environmental impacts, that you also compare them to the present energy loads, mainly coal, that produces such greenhouse gases, that do more than just pollute the air, they also endanger our streams, hurt the fish and kill the birds.

Also, because I'm going to be around for a while, I'd like to try to see this go a little faster than ten years out, because many people are looking to have as much scientific data as possible. We don't know if the birds are going to run into a turbine, a turbine out there. And in that course, I'd like to see -- I'd hope that we could get a process in which, as NREL has stated, test sites on the same size and same scale that we have over in Europe. Thank you. And have a good evening.

MR. GASPER: Thank you. Next speaker is Jim Brown.

MR. BROWN: Hi. My name is Jim Brown. I live in Long Beach, and speaking primarily as a private citizen, but the South Shore Audubon Society asked me to come down tonight, just to check it out

and see what was happening here.

Generally, personally, I support a wind power and I think there's a real need to begin some kind of pilot program. But several concerns should be addressed in the environmental impact statement, and a lot of these have been touched upon tonight and that's the importance of the bird survey, and that the science should be very good on that, to see, you know, the impact on birds.

The question -- I have some questions regarding the aesthetics, also, and wondering in an environmental impact statement, how you would actually measure that. Someone might, looking off shore, enjoy seeing windmills. We've seen that expressed tonight. Other people apparently find them abhorrent. I was just wondering, in the environmental impact statement, how you would measure the impact on something that's somewhat or very subjective, and I hope that would be spelled out. I don't know if you have any answers tonight on that. But just wondering how that would be measured.

Finally, the scoping should be, you know, as wide as possible, including as many things as were mentioned here tonight by numerous people. And as I say, the South Shore Audubon Society and other local

audubon societies are waiting to see the science, because, you know, primarily these concerns of aesthetics, use of public space, and of course, the impact on birds. And I would hope that all of these would be addressed. Thank you.

MR. GASPER: Thank you. Next speaker,

Adrienne Esposito, Citizens Campaign for the

Environment.

MS. ESPOSITO: Good evening. I just have -- Adrienne Esposito, executive director of Citizens Campaign for the Environment. I just have one more item to add to our list that we would like the scope to look at, that my colleague couldn't add because of the time constraints. And that is that, we said it earlier, we support a site-specific environmental review. However, in addition, we also believe that in this programmatic EIS, it is certainly necessary and it would be meaningful to also include a discussion about the collective impact that renewable energy development on the continental shelf can and will have to the reduction of fossil fuel emissions, and how that reduction of fossil fuel emissions impacts our ocean waterways.

The greatest threat -- One of the greatest threats right now to our ocean waters is the burning

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of fossil fuels. So, how will the reduction of those emissions impact such serious issues as the rising acidity level in our ocean, acid rain, mercury in fish, bleaching of coral reefs, sea level rise, the degradation of wetlands due to sea level rise, and the impact to marine species that cannot adapt quick enough to the climate change that the ocean is experiencing?

So, as we weigh the benefits and the costs to development of renewable resources on the continental shelf, we need to add to that formula, what is the benefit of reduction of fossil fuel emissions to the ocean environment and to the public health, as well. And we're asking for that discussion to be included in the programmatic EIS. Thank you.

MR. GASPER: Thank you. Next speaker, Harold Read.

MR. READ: Thank you for the opportunity to speak with you this evening. One of the concerns I have, as someone who thinks that LIPA's off-shore project is ill-advised and is terribly the wrong thing for Long Island is the publicizing of meetings such as this. A number of meetings had been held with -- by LIPA, Long Island Power Authority, in which very many people simply -- of which many people were unaware.

And I hope, as you hold your meetings, you do -- you do hold them in a way that is such that they're made known.

Now, I heard about this meeting a week ago, someone sent me an email. And then, today, I read -- And I fully intended to come here tonight and talk about the LIPA project. And yet, today, in Newsday, there's a big article about the fact that the LIPA project was some how getting a fast track treatment, would not be subject to the same rules and regulations that every other project is, and would not be discussed tonight. So, you know, here -- The very fact that I'm here talking with you is the product of -- I am the product of some confusion. So, I would hope that you would do whatever you can to give everyone the opportunity to know of the existence of these meetings when you hold them.

And I would just like to make one final comment on the -- on the LIPA project. I think that it's the wrong project in the wrong place. If you want to start out experimenting with off-shore wind power, don't do it at an actual historic site. You wouldn't certainly want to have a bunch of windmills installed, let's say, in front of the Statue of Liberty, or any other magnificently precious spot.

Long Island's beaches, particularly, Jones Beach, is very much dear and near to our hearts. And I think there must be somewhere in this country of ours, an area where off-shore wind power could be experimented with, without immediately hitting one of the most popular beaches in the country. Thank you.

MR. GASPER: Thank you. Okay. That's the end of the list of registered speakers. Is there anybody else who'd like to make a statement? Yes. Please state your name and affiliation, if you have one.

MR. PRATT: My name is Charlie Pratt and I'm here tonight for American Wind Power and Hydrogen. The Minerals Management Service's May 2006 technology paper that was issued in association with a EIS, listed a number of impacts and they all seem to be the adverse impacts that were going to be studied in the EIS. And I guess the general point I would like to make tonight is that, I think there really ought to be some balancing and they ought to take a hard look at what the positive benefits of the off-shore wind will be.

So, I'd like to say one or two things tonight about the benefits of the -- of an off-shore wind project and particularly, as they relate to

hydrogen production. We all know these days that energy security and global warming and the export of our capital to other countries provide a very strong incentive for wind farm development. And it's been said earlier tonight that, Europe has recognized wind energy as a means to reduce the global warming problem.

In fact, it is estimated that by 2010, wind energy will meet one-third of the European union's Kyoto obligations. European -- Europe is also focusing on hydrogen production that would come from renewable wind resources. There are, in fact, over 50 fuel transit buses, either internal combustion engine buses or fuel cell buses, either in service or on order in Europe. So, off-shore wind energy can be converted into hydrogen by electrolysis. The advances in electrolysis technology have results in equipment suppliers in this country, now offering to build large size, in the megawatt size of equipment scale plants. In fact, there are about seven of these large electrolysis machines that are either on order, or under consideration.

So, I would suggest to the MMS that, it consider the benefits to the country and the preferences of the majority of our country's citizens

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1 to have air pollution reduced, global warming reduced and energy security enhanced through the use of off-2 In fact, the transportation system here 3 shore wind. 4 in the New York/New Jersey area adds about 1.7 million 5 tons of pollutants to the air every year. switch to more off-shore wind producing hydrogen could 6 7 fuel the entire mass transit system in this area. 8 Thank you very much for your attention. 9 Is there anyone else? MR. GASPER: Yes, 10 ma'am. 11 MS. SHARI: Good evening. My name is Lisa 12 I wasn't going to speak tonight, because Shari. everyone here spoke a lot about the environment, about 13 14 money, about Long Island and what a jewel Jones Beach 15 But I do have one thing that really troubles me is. and that is, that every speaker that spoke tonight in 16 17 favor of this project, or any other wind project, or any other off-shore project is getting paid by 18 19 somebody, even the environmental groups. 20 Thank you. Yes, sir. MR. GASPER: 21 MR. BROOKS: Hi. I'm John Brooks from the 22 Save Jones Beach Association. I spoke earlier, was 23 rushed and was a little overwhelmed at speaking 24 before. A number of wind farm spokesmen here talked

about maybe getting a pilot project or a test project,

1 in thinking, that maybe Cape Wind or the Long Island off-shore project would be a test project. 2 3 The gentleman, Mr. Musial, talked about 4 Horns Rev in Denmark as being a test project. I don't 5 know if you would like to know what those people went through between the years 2002 and 2004. That project 6 7 was so inefficient and broke down so many times, they 8 had 77,000 service calls for 80 turbines in that area, 9 and they wound up replacing every single turbine. 10 don't want that off Jones Beach. Thank you. 11 Thank you. MR. GASPER: Yes, sir. 12 I was the first speaker and I MR. CARRA: rushed --13 14 GASPER: Would you say your name, 15 again, for the record? MR. CARRA: Yes. Robert Carra. I was the 16 17 first speaker and I literally ran through what I had 18 to say. Now, I'll take a little time to say something 19 that's totally unrelated to what I said before, which 20 had to do with radar and some very poignant concerns. 21 And living underneath the flight patterns, I think you 22 should take some close scrutiny of that, and the 23 nautical demands that are placed on two inlets. 24 within 17 miles is JFK. Thirty some odd miles, 25 Calverton and Newark.

We have two major inlets with shoaling. There's republic. I mean, it's right smack dab in the middle of one of the most significant traffic areas in the world. And if you don't really take a serious look at what you're doing there, we got a real severe problem. The Coast Guard and everyone is like saying, whoa, what's going on here. All right. Enough of that.

Nobody's, especially, the environmentalists and the pro-wind people discussed one thing. Nobody in this whole place has said anything but consume, consume and more consume. And I know you guys might not have anything to do with consumption, but maybe, somebody might have something to do with conservation. How about reducing the demands that we want to sell more of this energy? Sell more. Consume more. Bury the earth. And what I meant about our children, our children's children not seeing the light of day.

You guys can talk about all you want, but the bottom line comes down to knock out your plasma screens, knock out your SUV's, knock out your Viking stoves, knock out our system. I don't know. But darn it, we better wise up, because there ain't going to be much left for our grandchildren.

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1 MR. GASPER: Thank you. Anybody else? 2 ahead. 3 MR. RAACKE: Again, Gordian Raacke, 4 Renewable energy Long Island. I just wanted to finish 5 a couple of point I didn't get to finish before. On the programmatic EIS, while we believe 6 7 that a PEIS will go a long way to protect our marine environment and at the same time allow off-shore 8 9 renewable energy development, we urge MMS to require 10 a full site-specific environmental impact statement 11 for each project going forward, at least in the early 12 years. Given that the U.S. has essentially no 13 14 prior experience with off-shore renewable energy 15 projects, RELI believe that it is paramount to ensure that each propose project undergoes a rigorous and 16 17 site-specific environmental and regulatory review. 18 And that goes for the Long Island project. 19 want that to be extremely rigorous and thorough. I wanted to give -- give you some specific 20 21 comments on scoping issues for this PEIS. I have not 22 heard much of that. It's been a little disappointing. 23 I thought that some of the people that are opposed to 24 the Long Island project would come up with specific

scoping issues for the PEIS. But this is a list,

historically, but I have 16 issues I wanted to bring up. I'll rattle through them quickly.

On the environmental side, number one, impact on migratory bird populations. Number two, impacts on endangered species. Number three, impacts on marine life and environment, including ocean bottom impacts. Number four, impact on marine mammals from potential underwater noise or vibrations during construction, during operation and during decommissioning. Number five, potential mitigation issues and measures.

other potentially negative These and environmental impacts must be weighed against positive impacts or benefits that are typically devised from renewable energy projects, including number six, pollution avoidance and resulting air and water quality and public health benefits. Number seven, greenhouse gas emission avoidance and mitigation of global warming and climate impacts. Number eight, impacts from a no-action alternative, meaning, if a project were not to be built, what would the impacts be compared to fossil fuel extraction and power generation.

On the economic impacts, number nine, impacts that could be positive or negative, that we

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need to look at that on tourism, on beach activities, on boating and other recreational uses. Number ten, impact on commercial and recreational fisheries. Number 11, potentially positive impacts on local, regional and national economy due to the avoidance of purchasing of imported fossil fuels. Number 12, potentially positive impacts on price stability of electric rates, something we are very concerned about here in Long Island. Number 13, potentially positive impacts on the economy due to job creation and other secondary or indirect economic benefits typically associated with renewable energy technologies.

Other issues such as number 14, aesthetic impacts need to be looked at, obviously, in the PEIS. And number 15, potentially positive impacts on our national security. And number 16, positive impacts on secured energy supply and diversified energy portfolio.

Thank you, again, for giving me the opportunity to provide these comments. This is just the beginning. I commend you for conducting this process and for allowing all of us to provide input and comments. Look forward to working with you in the future. Thank you.

MR. GASPER: Thank you. Yes, sir.

1 MR. CARRIER: Just a few final comments. 2 Rick Carrier --3 MR. GASPER: Would you please repeat your name and affiliation. 4 5 MR. CARRIER: Rick Carrier, Bald Eagle Power Company, New York City. Here tonight, we have 6 7 Florida Light & Power, we have LIPA, and we have --The only one missing is Jim Gordon from Cape Wind. 8 he was here tonight and all three of us stood together 9 10 and said, why are we doing this? Why are we even 11 going near the water, cause so many people are trying 12 to knock us out of the water. Look at the Cape Wind project, Senator 13 14 Kennedy and the other people up there are forming 15 blocks with the Coast Guard. They're trying to kill 16 We've got to put a mile and a half waterways 17 through it. If that passes up there, then, every 18 state in the United States, the government will have 19 control over the -- over the off-shore wind, or power, 20 or whatever we want to do. But most people, not one 21 person in here said why we're here. 22 Well, quite frankly, why we're here is 23 because America's at war. I think everybody forgot 24 that. It didn't get mentioned. Why are we at war?

We're at war because of oil, O-I-L.

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Billions and

billions of dollars of America are going over there, putting the powder in the guns and the people trying to kill us and killing us. And who in the heck is going to stop it? We, three of us right here, are standing in here trying to create an environment, where we're going to get rid of oil, because of wind power and all the projects are not using oil. And if we can put together a million, or two million, or three million megawatts of power to make electricity, to make hydrogen, or to do whatever we want, by gosh, we will get rid of that oil. And darn it, that's what we got to do.

We can't just go around -- I mean, you're talking about fish and everything else. One dragger working those fields out there, are killing more fish than anybody can imagine. Ripping up the bottom. Tearing it. Mud going all over the place. And they're talking about that. They're talking about the windmills hitting birds. I've seen the statistics on that. One of these big rotors going through there, darn few of them impact birds.

And a lot of these other issues that are always coming up about the environment, fish and other things. By gosh, the fish are out there, and the thing is, pollution in the water. We need clean air,

1 clean land and clean water. Renewable energy is the 2 only way we're going to get it. We got to get rid of 3 We got to get rid of oil now, not -- not two 4 years from now. Thank you. 5 MR. GASPER: Thank you. Anybody else? Bob Link, permit compliance 6 MR. LINK: 7 officer, Winergy Power, round two. I'll make this short. I'll make it sweet. 8 I've listened to a lot of people here 9 10 tonight, including myself, and I've got something 11 that, again, should be considered in the scope. Don't 12 fool me with the facts, let me be emotional. The 13 facts, people that live around traditional power 14 plants die at 58 years old. The facts, mercury 15 poisoning is causing approximately 27,000 children to be born every year from coal pollution. We pay for 16 17 The facts, the amount of pollution that we're that. 18 putting into the air is killing more people with 19 respiratory diseases than drunk driving, U.S. 20 The facts, when the scope is done, a fair comparison to relay the facts. Put the facts down. 21 22 Make a comparison. Have a nice day. 23 MR. GASPER: Thank you. 24 MS. ANNETE: I will be brief, and I do beg 25 forgiveness overstaying vour for mу welcome

1	previously. With all due respect, I feel that three
2	minutes is a little bit tough to cover the breadth and
3	scope of what is so important and the reason that we
4	are all here with our time and our attention and our
5	research. And I don't think that it is a place for
6	rudeness or heckling. So
7	MR. GASPER: I'm sorry. Could you state
8	your name, again, just for the record?
9	MS. ANNETE: It's Sashe, again. And this
10	this will happen. This must happen. We do not
11	have a choice. And these are not my words. These are
12	the words of scientists and policy makers and the
13	people that are at the forefront of this entire
14	prospect.
15	If we continue with a lead tight
16	mentality, we're not going to have a future. We are
17	the endangered species. I'm going to leave you with
18	a quote from Robert Nestor Marley, who wrote a
19	beautiful song called "Redemption Song." How long
20	shall they kill our profits, while we stand around and
21	look. We do not have time to stand around and look.
22	Thank you.
23	MR. GASPER: Thank you. Yes, sir. Him
24	and then, you. You can talk after him.
25	MR. HEALEY: Thank you, again. Philip

Healey from Biltmore Shores Civic Association. It's interesting, some of the people are opposed to it, but I consider are opposed to it. I want to thank some of the environmental people for bringing up some tough issues here. You studied a lot greater, the horseshoe crabs, whatever. We're sort of on the same side in many respects.

I take offense to the people who are going to make a lot of money off this wind energy. They're going to take care of themselves very well. It's outrageous that you bring -- you bring in the government to help you benefit, personally, out of this. This is not what this meeting's about.

I want to thank you, again, also, for letting us come up again.

MR. GASPER: Thank you.

MR. HERGH: Charles Hergh. I'm a retired engineer. I must say, the renewables are not the answer. If you want to clear up all this pollution, get rid of our use of fossil fuels and take care of reduced carbon dioxide emissions tremendously, you would go to nuclear energy. This is really the answer, not these renewables. That wind farm is a piece of junk. It's not delivering a hundred and 40 megawatts. That's only at peak wind speed.

Τ	so, I must warn you people right now, you
2	got to watch those gas hydrates in the oceans, because
3	the way these things are going here, they're going to
4	end up in our atmosphere. I can't say that renewables
5	is the answer. I'm sorry you people can't see nuclear
6	as the answer. All you have to do is look at Europe.
7	France, 76 percent, and they have 14 percent hydro-
8	electric. That means that 90 percent of their of
9	their electricity is produced without producing carbon
10	dioxide, or without using fossil fuels. That's the
11	answer, not any of this garbage that was mentioned
12	before.
13	I'm not getting paid by anybody, and
14	that's what I'm telling you. You have to go nuclear.
15	I'm sorry. Okay. Thank you very much.
16	MR. GASPER: Thank you. Anybody else have
17	comments on what the scope of the PEIS should be? If
18	not, then, we can note it's quarter of nine, and the
19	scoping comment period is closed.
20	Thank you for coming.
21	(Whereupon, the meeting was concluded at
22	8:45 p.m.)
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